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SCN females on roots; it's time to scout

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Abstract
The soybean cyst nematode (SCN) is an important, widespread soybean pest in Iowa that often goes unnoticed, particularly in years of adequate to excess rainfall. To date, SCN has been discovered in 84 of the 99 Iowa counties, and it is suspected to be present in many additional counties. The only consistent and reliable sign of an SCN infestation in the field is the presence of adult SCN females and cysts (dead females) on the roots of infected soybean plants. The adult SCN females and cysts appear as small, white- to yellow-colored objects, each approximately the size of a period at the end of a sentence.

Keywords
Plant Pathology

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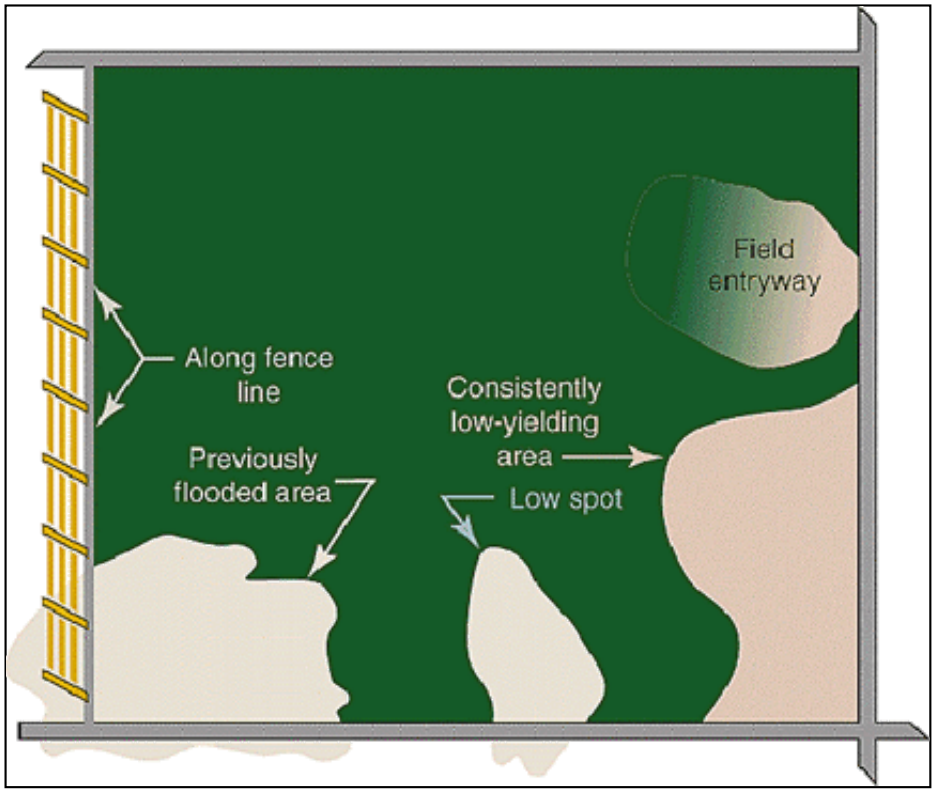
The soybean cyst nematode (SCN) is an important, widespread soybean pest in Iowa that often goes unnoticed, particularly in years of adequate to excess rainfall. To date, SCN has been discovered in 84 of the 99 Iowa counties, and it is suspected to be present in many additional counties. The only consistent and reliable sign of an SCN infestation in the field is the presence of adult SCN females and cysts (dead females) on the roots of infected soybean plants. The adult SCN females and cysts appear as small, white- to yellow-colored objects, each approximately the size of a period at the end of a sentence.

 [1] **Adult soybean cyst nematode females on soybean roots.**

During the second week of June, SCN females were observed on the roots of soybean seedlings received by the ISU Plant Disease Clinic from Johnson County. These soybeans were planted in mid-May. Now that the first adult SCN females are beginning to appear, females and cysts will be observable on the roots of infected soybean plants through much of the growing season, until late summer or early fall when the plants begin to mature. Consequently, now is the time to begin scouting for SCN by checking soybean roots for the easily seen females and cysts.

To scout for SCN in fields where the nematode has yet to be found, one may wish to target fields cropped to several years of soybeans in the past and fields where soybean yields have declined over time for no apparent reason. Because SCN is spread by the movement of infested soil, checking roots of plants near the entrance of fields where farm equipment enters and along fence lines where wind-blown soil accumulates also may increase the likelihood of finding SCN-infected plants.



Likely spots where SCN might first appear in a field.

Collection of soil samples from fields suspected of being infested with SCN is an alternative to scouting for adult females and cysts on the roots of infected soybean plants. Soil sampling for the presence of SCN can be done at any time during the growing season. Soil samples should be submitted to one of several private laboratories throughout the state that offer nematode testing as a service or to the ISU Plant Disease Clinic (515-294-0581) for extraction and counting of SCN eggs. Samples sent to the ISU Plant Disease Clinic should be accompanied by a completed Plant Nematode Sample Submission Form [2] (ISU Publication PD-32), and there is currently a $15 charge per sample for this analysis. Detailed instructions on how to collect a representative soil sample for detection of SCN can be found on the back of the Plant Nematode Sample Submission Form.

Iowa State University publication IPM-47s, Scouting for Soybean Cyst Nematode, illustrates the recommended procedures for scouting for SCN. Single copies of this publication are available free of charge from county extension offices [3] or from the

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